City of Bellevue

Transportation Commission Study Session

DATE: June 21, 2018

TO: Chair Wu and Members of the Transportation Commission

FROM: Kevin McDonald, AICP, Principal Transportation Planner, 425-452-4558 Kmcdonald@Bellevuewa.gov

SUBJECT: Level-of-Service in Bellevue – Toward a Multimodal Approach to Mobility

DIRECTION REQUESTED

	Action
X	Discussion
X	Information

On April 13, 2017, the Transportation Commission approved a recommendation to establish metrics, standards and guidelines for vehicle, pedestrian, bicycle and transit modes. Attachment A is a summary of the Commission's MMLOS recommendation. A modal prioritization schedule was reviewed with the Commission on December 14, 2017 and is included as Attachment B.

At the study session on June 28, 2018, staff and the consultants at Fehr & Peers will review and discuss several options to implement projects and to achieve MMLOS standards and guidelines through private-sector developments.

No action is requested of the Transportation Commission at this meeting. Staff will seek Commission feedback toward refining these options. During the course of one or more subsequent meetings, the Commission will be asked to prepare a recommended plan to the City Council for MMLOS implementation through development review.

BACKGROUND

The Transportation Commission's MMLOS Final Report contains the recommended level-of-service metrics, standards and guidelines for each mode – vehicles, pedestrians, bicycles, and transit. The Commission previously identified a methodology that would help to identify projects, prioritize implementation and document trade-offs.

IMPLEMENTING MMLOS CURRENTLY

Bellevue Transportation staff have for years viewed mobility investments through a multimodal lens in CIP transportation investments and program project priority and design. The Commission's work on Multimodal Level of Service has provided a more formal and objective decision framework. This approach enhances consistency and predictability in the decision-making process. What follows is a listing of the transportation project and program areas in which MMLOS metrics, standards and guidelines are currently integrated in some way in decision-making. This is all background information to precede the proposal section of this memo, and staff will not include this material in the presentation at the June 28 study session.

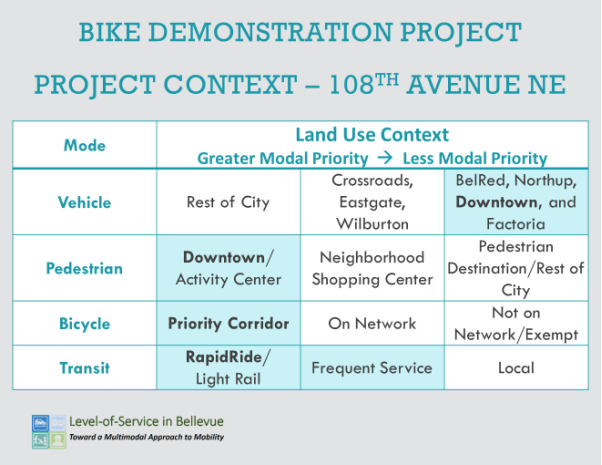
- Transportation Facilities Plan (TFP) Project Evaluation Criteria for PBII Reserve
  - The TFP is a 12-year revenue-constrained project list, updated every two years. The Transportation Commission is scheduled to transmit a project list recommendation to the City Council on July 9, 2018 – this deliverable follows 11 Commission study sessions, including meetings on December 14, 2018 and January 11, 2918 to consider Vehicle LOS standards to evaluate candidate roadway/intersection projects.
- Neighborhood Sidewalks Program Project Descriptions and Prioritization
  - This ongoing CIP-funded program is intended to build various types of pedestrian facilities to connect residents to neighborhood destinations including housing, parks, schools, shopping and activity centers, employment and/or the transit and school bus systems. At the Commission study session on October 26, 2017 staff reviewed the project prioritization criteria framework based on Pedestrian LOS metrics, standards and guidelines to objectively identify and prioritize projects.
- Transportation Design Manual Update
  - The Transportation Design Manual is an administrative document that provides very detailed information to the private sector and to engineers on city projects about the design requirements for transportation facilities. The Design Manual engineering drawings are amended/updated periodically to reflect evolving standards and guidelines. Infrastructure components in the Design Manual such as intersection treatments, bicycle facility types, bus stops, and sidewalk and landscape width will reflect recommended MMLOS metrics, standards and guidelines.
- Capital Investment Program (CIP) Transportation Projects and Programs
  - The CIP supports specific projects and broadly intentioned programs to advance mobility for all modes. MMLOS helps inform project design and prioritization. Within the CIP project list are vehicle capacity projects (guided by Vehicle LOS standards) pedestrian facilities (guided by Pedestrian LOS dimensional requirements and guidelines) and bicycle facilities (using Bicycle LOS design guidance to achieve the intended level of traffic stress on corridors and at intersections)
- Subarea Planning
  - As circumstances warrant, the City Council will initiate a review of the land use and transportation (and other) components of policy and code for a defined geographic

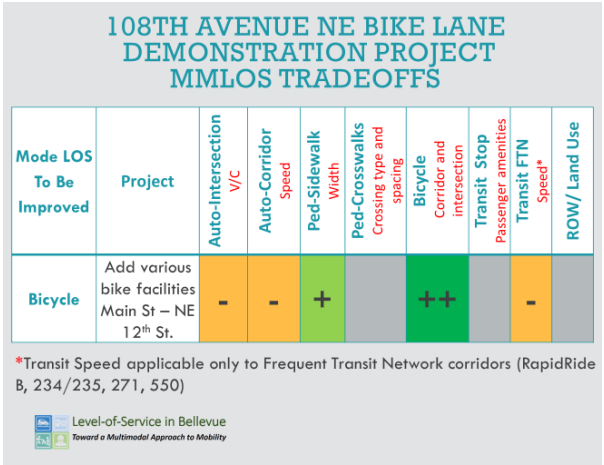
area. Such review may encompass and entire subarea, Downtown for instance or BelRed, or the review may have a more specific geographic focus. Two such narrowly defined planning efforts are the Wilburton Commercial Area and the East Main Transit Oriented District, each of which has considered and incorporated MMLOS:

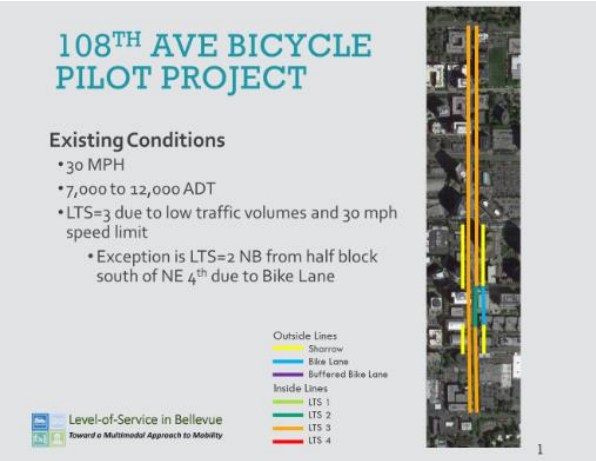
- Wilburton Commercial Area. Council appointed a citizens advisory committee (Commissioner Wu, Co-chair) to establish an overall vision for the land use and transportation system that would capitalize on light rail investments and create opportunities for a new urban neighborhood. A review and analysis of alternatives is documented in the Draft Environmental Impact Statement (February 2018). MMLOS provided an objective framework to review and evaluate mobility components, alternatives and implications. The CAC will present a recommendation to Council on July 2, 2018.
- East Main TOD Implementation. A citizens advisory committee (Commissioner Lampe, Chair) prepared a land use and transportation recommendation (June 2016) for the area across 112th Avenue SE from the East Main Link Station that is currently under construction. Comprehensive Plan and Land Use Code amendments and transportation facility designs are being drafted by staff for Council consideration in July. Transit access and arterial frontage and intersection improvements are incorporating Transit LOS and Pedestrian LOS guidelines.

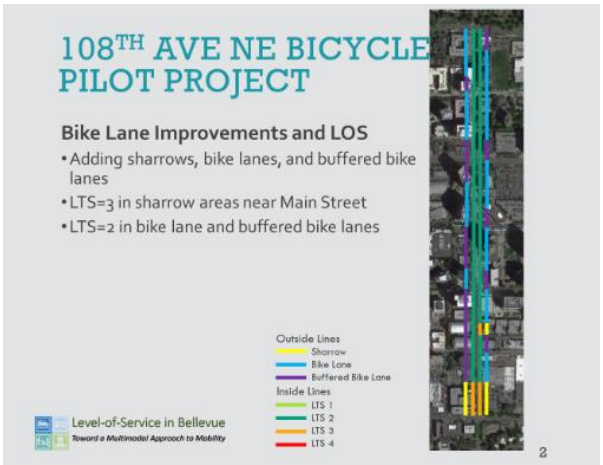
- Transportation Levy Projects
  - Congestion Reduction Projects – At the Commission meeting on January 12, 2017, staff presented a travel time analysis to help evaluate potential intersection improvement projects along the 148th - 150th Avenues SE corridor. Travel time is a precursor to the "typical urban travel speed" metric recommended in MMLOS. On October 26 and November 9, 2017 and January 25, 2018, staff reviewed the project scoring and prioritization for citywide neighborhood congestion projects using Vehicle LOS metrics among other factors.
  - Bicycle Facilities – Levy resources are funding enhanced or new bicycle facilities along arterials to meet Bicycle LOS guidance. Projects in 2018 include various types of bicycle facilities on: NE 24th Street east of Northup Way; 108th Avenue NE north of NE 12th Street and south of Bellevue Way, Eastgate Way east of Richards Road.
  - Eastgate Transportation Study – An existing conditions documentation is being prepared using MMLOS metrics, standards and guidelines. Evaluation and design of project concepts intended to provide congestion reduction will use Vehicle LOS metrics from MMLOS. Also, Complete Streets and Vision Zero policy will help in evaluating project concepts and preparing recommendations to reduce vehicle congestion while considering, accommodating and enhancing mobility for people walking, riding a bicycle or taking transit.

- Bike Demonstration Project – 108th Avenue NE – the design and evaluation of this bicycle demonstration project (installation June 2018) was discussed with the Transportation Commission on November 9, 2017 and January 11, 2018. The images below are from the staff presentation at the 1/11/18 Transportation Commission meeting and were used to evaluate the early stages of project design. They show how Bicycle LOS metrics and guidelines were used to document existing conditions and to test results.









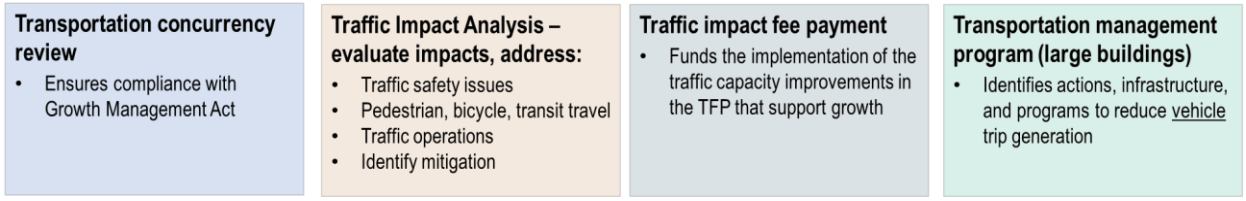
- Development Review
  - Bellevue staff work with private-sector developers to ensure that the transportation facilities that they are required to build as conditions of development approval are designed according to specifications. Currently, frontage improvements are required in accordance with city code and approved plans. Staff offer the MMLOS guidelines as an upgrade alternative to the minimum code requirements, and developers often see the value of these facilities and incorporate them in to site planning. For instance, transit facility improvements have been incorporated into the façade of new Downtown buildings to provide weather protection and seating at bus stops.

PROPOSALS - MMLOS IMPLEMENTATION THROUGH DEVELOPMENT REVIEW

As noted above, the use of MMLOS metrics, standards and guidelines is well embedded in the design of public projects and in the specific frontage improvements required of private projects.

Development Review – Traffic Analysis and Mitigation, Existing Process

For vehicle level-of-service, a traffic impact assessment is conducted, a concurrency determination is made, and impact fees are assessed – Vehicle LOS standards are met. Other mobility metrics are not explicitly integrated in the development review process. Below is a graphic representation of how the current development review process addresses traffic impacts. From this process, frontage improvement requirements are defined and traffic impact fees are paid that fund specified vehicle capacity projects.



Development Review – MMLOS Options

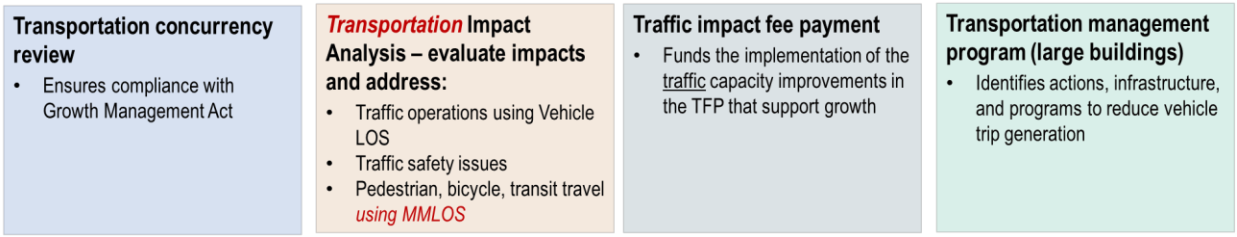
To more fully embed a multimodal approach to mobility through development review, off-site impacts and mitigation must be addressed. To mitigate off-site impacts, the existing development review process would need to be modified. What follows are three options to integrate MMLOS into the development review process for private sector projects with the objective of mitigating project impacts to all modes at off-site locations. Currently the traffic impact fee program support the funding and implementation of off-site projects only to reduce traffic congestion impacts. State law allows similar impact mitigation to support non-motorized facilities. A MMLOS approach would expand the list of eligible off-site mitigation projects to explicitly include non-motorized facilities that improve pedestrian access, reduce bicyclist level of traffic stress, and support transit use. Each of the options below would supplement existing requirements for on-site frontage improvements.

The presentation and discussion on June 28 will allow the Commission to explore these options in more detail. Staff will be interested to hear from the Commission if there is a preferred option that can be refined, or perhaps if there is an option that should receive no further consideration.

Option 1. Project-Level Analysis Through SEPA

MMLOS provides standards and guidelines for each mode. In Option 1, each development proposal would conduct a MMLOS transportation impact analysis and propose mitigation to address off-site impacts. Existing content requirements for a traffic impact analysis would be broadened to include: the MMLOS standards and guidelines used to identify projects; person-trip generation thresholds to trigger certain types of analysis; the geographic extent of the analysis; and a list of projects that would mitigate the level-of-service impacts for each mode.

This would be similar to the current development review process except that it would specifically include MMLOS metrics, standards, and guidelines (adding pedestrian, bicycle and Transit LOS to the transportation impact analysis); as shown in red font in the graphic below.



Points in favor of this option as compared to the existing system:

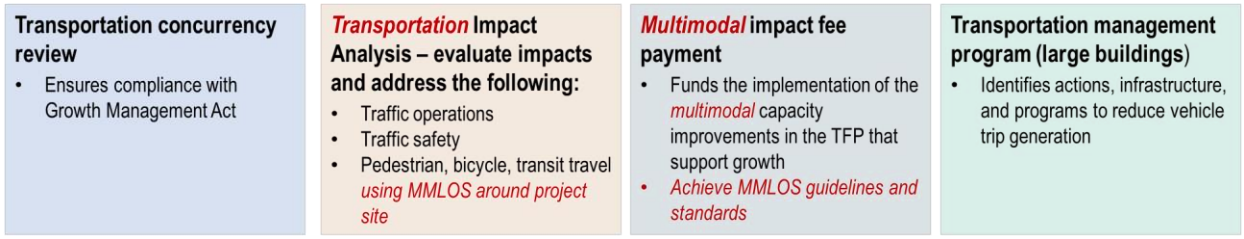
- There would be a clear statutory requirement for MMLOS analysis
- Mitigation would be required to address off-site impacts – all modes
- Other development review requirements would be retained, including the Traffic Impact Fee program

On the other hand:

- The cost to conduct a comprehensive, multimodal transportation impact analysis could be higher
- Staff time to review the above analysis could also increase
- Mitigation projects could be disputed
- Cost of mitigation may be more uncertain than current (dealing with 4 modes rather than only one)
- City would need to prepare transportation impact analysis content requirements

Option 2. MMLOS Impact Fees – Through the Growth Management Act (GMA)

In this option, a project developer would pay a multimodal impact fee intended to expand or improve the transportation system to help meet MMLOS standards and guidelines. This multimodal impact fee would replace the existing narrowly-focused traffic impact fee and would include projects to expand vehicle, pedestrian, bicycle, and transit access throughout the city. In addition to the multimodal impact fee, a developer would prepare a transportation impact analysis that would include a MMLOS review with a focus on the immediate project vicinity. The city would update the Impact Fee Program to include multimodal trip generation rates; create a list of eligible multimodal capacity projects for which a developer would pay an impact fee; and prepare a fee study and rate table. This is the commonly used method to implement MMLOS in several Washington municipalities (Bellingham, Kenmore, Kirkland and Redmond), also used in Portland, Oakland, and Pasadena. Red font in the graphic below represents changes from the current system.



Points in favor of this option as compared to the existing system:

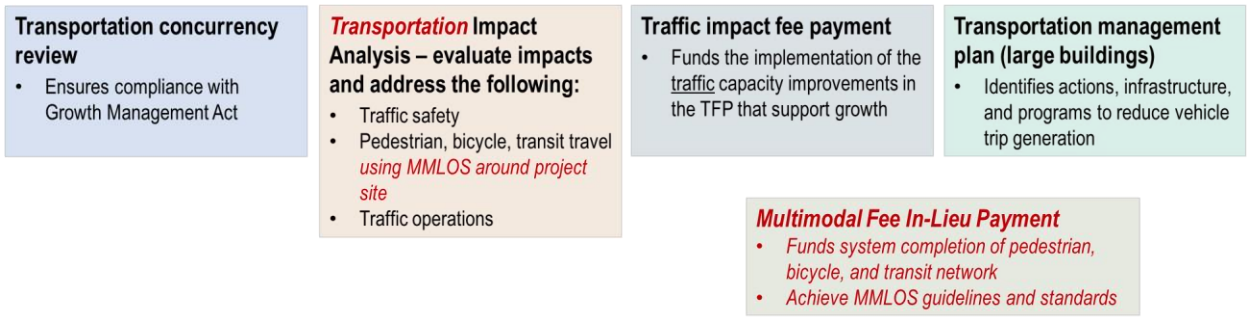
- This option has a strong policy and legal basis
- City would prepare and maintain the project list and implementation priorities
- Developer would have limited ability to dispute impact fee for a mitigation project
- Mitigation impact fee amount would be predictable

On the other hand:

- A significant up-front city investment would be required to update the Impact Fee Program

Option 3. MMLOS Fee In-Lieu Through SEPA

The city would prepare a citywide MMLOS impact analysis and identify mitigation projects that would be eligible to receive funding. All potential mitigation projects on the citywide list would address MMLOS and also would provide transportation capacity for new development. A developer would have a choice of: a) building a project that would reduce its impact to the transportation system; b) paying a fee-in-lieu; or c) conducting a study to determine an alternate approach. This approach is rarely used in Washington, notably by the city of Seattle in South Lake Union and Northgate, and in Issaquah. A program such as this could be implemented in Bellevue with application limited to a subarea, Downtown for instance, to direct fees to projects the subarea where the fees are generated.



Points in favor of this option as compared to the existing system:

- The city would prepare and manage the mitigation project list
- Would retain the Traffic Impact Fee program in its current form
- Impact fee amount would be predictable

On the other hand:

- Would require city to identify multimodal mitigation projects and draw a nexus to the impacts of development projects
- Impact fee-in-lieu would be voluntary – developer could prepare an independent study and propose alternate mitigation
- Accounting requirements would be set up to track fee-in-lieu payments and mitigation expenses

ATTACHMENT A

Transportation Commission MMLOS Recommendation Summary Table

MMLOS SUMMARY			
Mode	LOS Metric	LOS Standard	LOS Guideline
Vehicle	Volume/Capacity or Average Delay at Intersections	V/C: 0.80-0.95. Delay: 20-80 sec. Varies by land use context	
	Typical Urban Travel Time/Speed on Arterials		Percent of posted speed limit, LOS varies by neighborhood context
Pedestrian	Sidewalk and Landscape Width	12-20 feet Varies by land use context	
	Pedestrian Comfort, Access and Safety at Intersections		Design varies by land use context
Bicycle	Level of Traffic Stress on Corridors		Design to achieve LTS varies by roadway traffic speed and volume
	Level of Traffic Stress at Intersections		Maintain corridor LTS at intersections. Design components vary by context
Transit	Passenger Comfort, Access and Safety		Varies by transit stop/station typology
	Transit Travel Speed on Corridors		14 mph on Frequent Transit Network corridors between activity centers

ATTACHMENT B

MMLOS Modal Priority Table

Mode	Land Use Context Informs Prioritization Increasing Priority For Each Mode →		
Vehicle	BelRed, Downtown, Factoria	Crossroads, Eastgate, Wilburton	Elsewhere in the City
Pedestrian	Elsewhere in the City	Neighborhood Shopping Center / Pedestrian Destination	Downtown/ Activity Center (BelRed, Factoria, etc)
Bicycle	Not on Bicycle Network or on an Exempt Arterial	On Bicycle Network	Priority Bicycle Corridor
Transit	Local Transit Service Stops	Frequent Transit Network Service Stops and Corridors	RapidRide/ Light Rail Stations and Corridors